

features but alleges that Fujishima overcomes the deficiencies of Ozawa and that the combination would have been obvious.

The combination of Ozawa and Fujishima would not have been obvious at least because the modification of Ozawa proposed in the Office Action would improperly change the principle of operation of Ozawa and therefore is not sufficient to render the claims *prima facie* obvious. See MPEP §2143.01(VI).

Ozawa discloses an exposure method and a projection exposure apparatus related to a technique for enabling a pattern to be formed that surpasses the resolution limit of a conventional exposure by a stepper. Ozawa uses a photosensitive material with a nonlinear sensitivity property to intensity of incident light and performs a plurality of exposure processes with a change of light intensity distribution on the photosensitive material. See Ozawa at col. 38, lines 35-65, and col. 39, line 55 - col. 40, line 41.

In addition, one of ordinary skill in the art would have understood, at least upon reading col. 2, line 65 - col. 3, line 19, of Ozawa, that an operation such as changing reticles or shifting a relative position of the reticle and the photosensitive material (wafer) is necessary for each exposure in the multiple exposure disclosed. In changing reticles or in shifting the relative position of the reticle and the photosensitive material, extremely accurate positioning of the reticle, or the reticle and the photosensitive material, is necessary in order to form a desired exposure pattern with high resolution in the photosensitive material. This accuracy makes positioning difficult and time consuming, and an improvement in throughput is unlikely. However, Ozawa provides a solution to the issue of throughput. Ozawa solves this problem with an exposure method and projection exposure apparatus employing two or more wavelengths of exposure lights. See Ozawa at col. 38, lines 35-65 and col. 39, line 55 - col. 40, line 41. Ozawa's disclosure including two or more wavelengths solves the problem

described above because extremely accurate positioning is unnecessary with Ozawa's method and apparatus.

Ozawa's method and apparatus are achieved by "two or more exposure wavelengths [that] are used in a pattern on a reticle [that] is constructed using optical filters having different transmittances for the two or more different exposure wavelengths" and "employ[ing] a photosensitive material consisting of two or more types of photoresist having different sensitivity properties for the two or more different wavelengths." Ozawa at col. 38, lines 28-34. Thus, Ozawa relates to an exposure method and an exposure apparatus wherein a pattern on a reticle is constructed using optical filters having different transmittances for two or more different wavelengths of exposure light and the reticle is irradiated with different wavelengths of the lights in each exposure of a plurality of exposures.

In justifying the combination of Ozawa and Fujishima, the Office Action states "the projection optical system may be simplified while improving resolution since the components of the projection optical system and illumination system will be exposed to only one wavelength of exposure light." Although the proposed modification of Ozawa would result in one wavelength of exposure light, this would improperly change the principle of operation of Ozawa because Ozawa relies upon two or more different wavelengths of exposure light to achieve the necessary accuracy. Thus, the combination of Ozawa and Fujishima would not have been obvious.

Claim 12 recites "a wavelength of said exposure light that enters said space under said first exposure condition is the same as a wavelength of said exposure light that enters said space under said second exposure condition." Claim 27 recites "a wavelength of said exposure light that enters said space is a same wavelength for said at least one exposure and for said another exposure, and said adjustment unit adjusts the substantial wavelength after

the exposure light enters said space." Thus, claims 12 and 27 are patentable at least for the reasons discussed above with respect to claim 1.

Claims 3, 6-11, 14, 19-23, 26 and 30 are patentable by reason of their dependency from one of independent claims 1, 12 and 27, as well as for the additional features they recite. Applicant respectfully requests that the rejection be withdrawn.

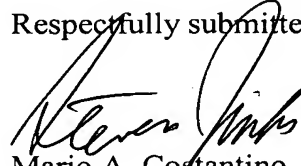
The Office Action rejects claims 4, 5, 15-18, 28 and 29 under 35 U.S.C. §103(a) over Ozawa in view of Fujishima and Kudo (JP 10-340846). Applicant respectfully traverses the rejection.

The rejection of these claims is premised upon the combination of Ozawa and Fujishima having rendered obvious all of the features of independent claims 1, 12 and 27. As discussed above, these references fail to do so. Further, Kudo fails to overcome the deficiencies of Ozawa and Fujishima. Thus, claims 4, 5, 15-18, 28 and 29 are patentable by reason of their dependency from one of independent claims 1, 12 and 27, as well as for the additional features they recite. Applicant respectfully requests withdrawal of the rejection.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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